



**PATENT**  
Attorney Docket No. CTX-052  
(1545/90)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

APPLICANTS: Otway et al.  
SERIAL NO.: 09/617,380 GROUP NO.: Not Yet Assigned  
FILING DATE: July 17, 2000 EXAMINER: Not Yet Assigned  
TITLE: Strong Mutual Authentication Of Devices

**INFORMATION DISCLOSURE STATEMENT**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

In accordance with the provisions of 37 C.F.R. §1.97, Applicants hereby make of record the references listed on the accompanying Form PTO-1449 for consideration by the Examiner in connection with the examination of the above-identified patent application. Copies of the references are enclosed.

**REMARKS**

In accordance with the provisions of 37 C.F.R. §1.97, this statement is being filed (CHECK ONE):

- (1) within three (3) months of the **Filing Date** or before the mailing date of the **First Office Action** on the merits; or
- (2) after the period defined in (1) but before the mailing date of a **Final Rejection** or **Notice of Allowance**, and
  - the requisite Statement is below, **OR**
  - the requisite fee under Rule 1.17(p), namely **\$240.00**, is included herein, or
- (3) after the mailing date of a **Final Rejection** or **Notice of Allowance** but before the payment of the **Issue Fee**, **AND**
  - Applicant hereby Petitions the Commissioner to accept and consider the attached Information Disclosure Statement, **AND**
  - the requisite Statement is below, **AND**
  - the requisite petition fee due under Rule 1.17(i)(I), namely **\$130.00** is included herein.

Information Disclosure Statement

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It is respectfully requested that each of the references shown on the attached Form PTO-1449 be made of record in this application.

**STATEMENT**

As required under §1.97(e), Applicants, through the undersigned, hereby state either that [check the appropriate space]:

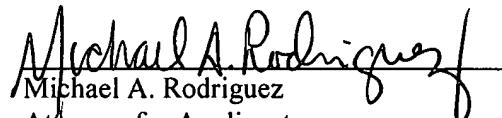
1. [E]ach item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application **not more than** three months prior to the filing date of the Information Disclosure Statement; or

2. [N]o item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and to the knowledge of the person signing this Statement after making reasonable inquiry, no item of information contained in the Information Disclosure Statement was known to **any** individual designated in §1.56(c) **more than** three months prior to the filing of the Information Disclosure Statement.

**FEE AUTHORIZATION**

Should any fee associated with the submission of this paper not be attached hereto as a check, the Commissioner is authorized to charge the missing fee to our Deposit Account, No. 20-0531. Any overpayments should be credited to said Deposit Account.

Respectfully submitted,

  
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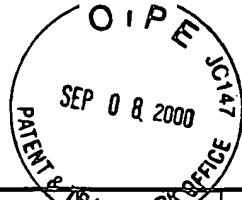
570MAR1545/81.A1063275-1



<b>FORM PTO - 1449</b> <b>INFORMATION DISCLOSURE STATEMENT</b>		<b>ATTORNEY DOCKET NO.: CTX-052 (1545/90)</b> <b>APPLICANT(S): Otway et al.</b> <b>SERIAL NO.: 09/617,380</b> <b>FILING DATE: July 17, 2000</b>	
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**U.S. PATENT DOCUMENTS**

EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	AA	4,924,378	05/08/90	Hershey et al.	364	200	06/13/88
	AB	5,204,897	04/20/93	Wyman	380	4	07/14/92
	AC	5,359,721	10/25/94	Kempf et al.	395	425	12/18/91
	AD	5,390,297	02/14/95	Barber et al.	395	200	11/10/87
	AE	5,412,717	05/02/95	Fischer	380	4	05/15/92
	AF	5,455,953	10/03/95	Russell	395	739	11/03/93
	AG	5,491,750	02/13/96	Bellare et al.	380	21	12/30/93
	AH	5,504,814	04/02/96	Miyahara	380	4	01/24/94
	AI	5,509,070	04/16/96	Schull	380	4	12/15/92
	AJ	5,524,238	06/04/96	Miller et al.	395	600	03/23/94
	AK	5,544,246	08/06/96	Mandelbaum et al.	380	23	09/17/93
	AL	5,550,976	08/27/96	Henderson et al.	395	200.06	12/08/92
	AM	5,550,981	08/27/96	Bauer et al.	395	200.06	06/21/94
	AN	5,553,139	09/03/96	Ross et al.	380	4	04/04/94
	AO	5,557,732	09/17/96	Thompson	395	161	08/11/94
	AP	5,564,016	10/08/96	Korenshtein	395	186	09/29/95
	AQ	5,592,549	01/07/97	Nagel et al.	380	4	06/15/95
	AR	5,604,490	02/18/97	Blakley, III et al.	340	825.31	09/09/94
	AS	5,638,513	06/10/97	Ananda	395	188.01	06/07/95
	AT	5,657,390	08/12/97	Elgamal et al.	380	49	08/25/95
	AU	5,668,999	09/16/97	Gosling	395	704	12/20/94
	AV	5,689,708	11/18/97	Regnier et al.	395	682	03/31/95
	AW	5,729,734	03/17/98	Parker et al.	395	609	11/03/95
	AX	5,737,416	04/07/98	Cooper et al.	380	4	08/02/96



	AY	5,742,757	Hamadani et al.	395	186	05/30/96	
	AZ	5,794,207	08/11/98	Walker et al.	705	23	09/04/96
	AAA	5,956,407	09/21/99	Slavin	380	30	07/08/97

## FOREIGN PATENT DOCUMENTS

EXAM. INIT.		DOCUMENT NUMBER	DATE	COUNTRY CODE	CLASS	SUB CLASS	FILING DATE	ABSTRACT ONLY	ENGLISH LANG Y/N
	BA	0 679 980 A1	11/02/95	EP	GO6F	1/00	04/18/95	N	Y
	BB	0 851 628 A1	07/01/98	EP	HO4L	9/08	12/23/96	N	Y
	BC	2 168 831 A	06/25/86	GB	HO4L	11/26	11/13/84	N	Y
	BD	97/18635	05/22/97	WO	HO4L	29/06	09/20/96	N	Y

## OTHER ART, JOURNAL ARTICLES, ETC.

EXAM. INIT.	OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)
CA	"IBM: "IBM Operating System/2 Version 1.2 Profile Validation Hooks", pages 1-26, November 22, 1989.
CB	N.F. Maxemchuk, S. Low, "The Use of Communications Networks to Increase Personal Privacy" from <u>IEEE INFOCOM' 95</u> , Proceedings, Vol. 2, April 2-61995, Pages 504-512.
CC	P.Y.A. Ryan, S.A. Schneider, "An attack on a recursive authentication protocol A cautionary tale" <u>Information Processing Letters 65</u> , 1998 Elsevier Science B.V., pages 7-10
CD	Dave Otway and Owen Rees, "Efficient and Timely Mutual Authentication", The ANSA Project, 24 Hills Road, Cambridge CB21JP United Kingdom, pages 8-10
CE	Lawrence C. Paulson, "Mechanized Proofs for a Recursive Authentication Protocol" Computer Laboratory, University of Cambridge, Pembroke Street, Cambridge CB2 3QG, England, pages 84-94
CF	Li Gong, "Using One-Way Functions for Authentication" University of Cambridge Computer Laboratory, Cambridge CB2 3QG, England, July 1989, pages 8-11
CG	Mark Nicholson, "How To Hold Mobile Users To Account" Financial Times, Tuesday, May 2, 2000.
CH	Tony Savvas, "Handset Giants Launch Security System" www.computerweekly.com
CI	Charles Seife, "Algorithmic Gladiators Vie For Digital Glory" www.sciencemag.org, Science, Vol 288, May 19, 2000, pages 1161 & 1163.
CJ	Russell Kay, "Authentication" Computerworld, March 27, 2000, pages 77-79.
CK	Tom Yager, "OS Paradise" BYTE, November, 1995
CL	Bridget Allison, Robert Hawley, Andrea Borr, Mark Muhlestein, David Hitz, "File System Security: Secure Network Data Sharing For NT And UNIX" Network Appliance, Inc., Tech Library, January 16, 1998 pages 1-16 (double sided)
EXAMINER	DATE CONSIDERED